

Complete Enterprise Modernization for a Healthcare Provider

The client is a healthcare provider who serves a large community of people in the North American region.

How Did It All Start

The client's old system was a slow-performing legacy system. Due to its complexity, adding enhancements or training new employees to use the system was difficult. It did not provide full-screen access, and the staff had to navigate multiple screens, even for something as simple as adding information to a patient's record.



Despite all the system usage, the staff had to do much paperwork and call people to verify the information. Since they used a lot of third-party vendor applications to get multiple functionalities, they couldn't customize these applications to suit their needs. Patients spent a considerable amount of time pre-visit to verify or submit their information and an equal amount of time post-visit to get the test results. This frustrated the patients and ate up into the performance of the front desk staff.

The system was so inflexible that it struggled to perform a critical job like registering vaccination appointments.

Once the client decided to phase out the existing system, they faced the challenge of replacing the legacy application with a massive volume of confidential patient data. The client wanted a fast, flexible, user-friendly, and centralized new system that could be used across their entire patient care ecosystem.

What Did We Do

The TVS Next team conducted extensive workshops and discussed with multiple stakeholders to understand the client's vision and business goals. Then we did an in-depth analysis of the current state of the system. The client desired to build a completely new system entirely from scratch. They wanted this proprietary system to be flexible to keep up with market changes and user-friendly so that their employees could use it with minimal training.

TVS Next built a multi-tenant SaaS platform with plug-and-play capabilities. The new system stores patient details in a centralized database that can be shared with other hospitals, labs, or service providers.

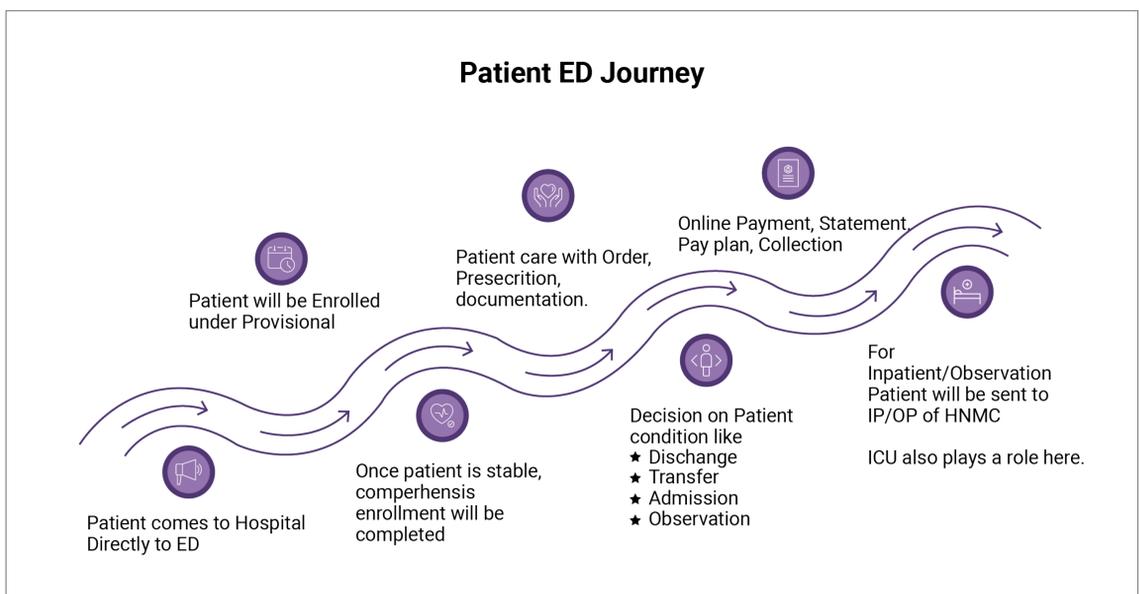
The system displays all the details of the patients on the central patient screen. It has also automated data transfer and facilitated patients' quick and easy interdepartmental transfer.

One of the main goals TVS Next worked towards was to make the new system as self-sufficient as possible by limiting the third-party dependencies. Since TVS Next understood the workflows of different departments, we built the product around the workflow requirements. Building so has reduced data discrepancies, increased system flexibility to introduce new features, and improved the overall service quality.

Understanding the struggles of the staff and the healthcare professionals enabled us to build separate modules that automated and streamlined multiple processes and departmental tasks. Some modules we built on request include HR application, mobile application to bridge senior citizens with doctors, specialist referral program, outpatient management program, vaccine appointment booking, housekeeping alert, and health census.

As the first milestone of the recommendations and solutions we had arrived at, we addressed the patient journey in one of the critical and high-impact departments – the emergency department.

Patient Journey Within The Emergency Department (Ed)



Business Outcome



Healthcare Staff Impact

- They have cut down 90% of the paper processes
- Predictive senses report helps the staff stay prepared for incoming patient flow
- It has improved productivity and reduced manual and repetitive tasks for all the employees
- The impact of the initial release in the emergency department led to staff requesting an extension of the system for other departments.



Patient Impact

- Setting expectations right in terms of out-of-pocket payments has increased patient satisfaction levels
- Patients do not have to wait long to fulfil pre and post-appointment formalities.
- Patients get automated reminders on the day of their appointment
- Self-service capabilities enable patients to book appointments, fill in their details and receive reports, all from their phone



Community Impact

- The new system created a ground-breaking impact on mass vaccination drives
- The hospital served the entire community without any hassles
- The media and public appreciated the hospital for immediately scaling operations at the time of need



Business Impact

- We have completely streamlined and automated flow of tasks and documentation between departments
- The hospital achieved a 2000% increase in appointment booking capabilities
- They were able to bring down their computing costs by 80%
- They witnessed a 35% reduction in the time required to run analytics and produce reports